

Remarks/Arguments:

Claims 1-26 are pending and stand rejected.

Rejection of Claims 23-26 under 35 U.S.C. §112, first paragraph

In the Office Action at item 3, claims 23-26 are rejected under 35 U.S.C. §112, first paragraph as failing to comply with the written description requirement.

This ground of rejection respectfully traversed.

In the Office Action, at page 2, the Examiner contends that the specification discloses:

the timing change portion (51) changes to timing at which input reception portion (11) detects an input magnetic wave, according to history information when the engine is stopped; but the specification fails to describe there is a clock portion for outputting a clock signal having a selected clock frequency among a plurality of clock frequencies, the input reception portion detects the input electromagnetic wave at periodic intervals corresponding to the selected clock frequency of the clock signal, and the timing change portion changes the selected clock frequency at which the input reception portion detects the input electromagnetic waves.

Applicants respectfully disagree with the Examiners contention. Applicants submit that the specification fully supports the limitations in claim 23. For example, Fig. 3A-Fig. 3C show waveforms of clock signals at plurality of timings generated by a clock generator included in the input reception portion 11. Fig. 3A shows that an input electromagnetic wave is detected at a timing of three times a second. Fig. 3B shows that the input electromagnetic wave is detected at a timing of once a second. Fig. 3C shows the input electromagnetic wave is detected at once every two seconds. These timing frequencies correspond to high (H), medium (M) and low (L) detection frequencies, respectively. (See the original specification at the paragraph spanning pages 6 and 7 and page 22, lines 10-13.) Figs. 3A-3C and the related disclosure in the original specification support changing a current clock frequency to a further clock frequency among the plurality of clock frequencies. Moreover, page 22 of the original specification discloses frequent detection (i.e., two or more detections) for a predetermined period to increase the timing frequency (i.e., clock frequency).

Accordingly, it is submitted that claim 23 is fully supported by the original specification. Applicants request that the rejection of claim 23 under 35 U.S.C. §112, first paragraph be withdrawn.

Claim 24

In the Office Action, at page 3, the Examiner contends that "the specification fails to describe the electromagnetic wave reception device comprises a switch to activate the timing change portion to change the selected clock frequency to a highest clock frequency."

Applicants respectfully disagree with the Examiner and traverse the rejections of claim 24 as well. The original specification at page 22, first full paragraph, discloses that "the timing change portion can set the timing frequency high immediately after the engine is stopped." One of ordinary skill understands the engine is stopped by turning off the ignition switch and further understands from Figs. 3A-3C of the present application that the timing frequency is set high by changing the selected clock frequency to the highest clock frequency of the high (H), medium (M) and low (L) clock frequencies shown in Figs. 3A-3C.

Accordingly, Applicant submits that claim 24 is also fully supported by the original specification. Applicant respectfully request that the rejection of claim 24 under 35 U.S.C. §112, first paragraph be withdrawn.

Claims 25 and 26

Claim 25, which includes similar but not identical features to those of claim 23, is submitted to overcome the rejection under 35 U.S.C. §112, first paragraph for at least similar reasons to those of claim 23.

Claim 26 which depends from claim 25, is submitted to be free of the rejection under 35 U.S.C. §112, first paragraph for at least the same reasons as claim 25.

Rejection of Claims 1-3, 7-9, 11, 13-14 and 18-19 under 35 U.S.C. §103(a)

In the Office Action, at item 6, claims 1-3, 7-9, 11, 13-14 and 18-19 are rejected under 35 U.S.C. §103(a) as being unpatentable over Hattori (JP 2003-102068) in view of Erickson et al. (U.S. Patent Publication No. 2002/0180588, hereafter referred to as Erickson).

This ground of rejections is respectfully traversed.

Claim 1

Claim 1 is directed to an electromagnetic wave reception device, and recites "a timing change portion sets a frequency of the timing higher when an input electromagnetic waves are detected a plurality of times for a predetermined period of time."

Hattori Reference

In the Office Action, at page 4, the Examiner acknowledges that "Hattori fails to disclose the timing change portions sets a frequency of the timing higher when input electromagnetic waves are detected a plurality of times for a predetermined period of time." Applicants respectfully agree with the Examiner's acknowledgment.

Erickson Reference

In the Office Action, at page 4, the Examiner contends that Erickson teaches:

a document and the file management system using radio frequency identification (RFID) tags. The system has an automated polling system to poll RFID tags attached to documents periodically to keep track of the location of the documents. An optical sensor could be placed in or near a storage area for the documents to detect activity in that area, and the automated polling system could accordingly increase the polling schedule depending on the number of traffic detected by the optical sensor in the storage area. If the number of people detected is more than a predetermined number, the system could alter the polling schedule to poll more frequently. (See the Abstract and Paragraph 50).

The Examiner also appears to contend that Erickson teaches input electromagnetic waves are detected a plurality of times for a predetermined period of time. (See Office Action at page 5, lines 5-8 in which the Examiner contends that "it would be obvious to modify the device disclosed by Hattori to include the timing change portions sets a frequency of the timing higher when input electromagnetic waves are detected a plurality of times for a predetermined period time as taught by Erickson to accommodate the increase in activity of the usage of the device thereby making the device more responsive to periods of higher activity.") Applicants disagree with the Examiner regarding the teachings of Erickson, and more particularly Erickson does not discuss changing of a frequency of the timing based on a condition (i.e., which is the detection of input electromagnetic waves a plurality of times within a predetermined period time). Instead, in Erickson RFID tags are used to handle items such as files. The Erickson system permits a polling schedule to be set by the user. The system also permits the polling schedule to be altered either temporally or permanently. The alteration of the polling schedule could even be automated. For example sensors, such as optical sensors, placed in or near a storage area to detect activity in that area and the automated polling system could accordingly decrease, increase, or leave the polling schedule unchanged based on the activity level detected. In Erickson it is clear that polling refers to interrogation of an RFID tag to obtain information about the RFID tag and the item with which it is associated. (See Erickson at paragraph [0030].) Thus, in Erickson the polling schedule is changed by changing the interrogation schedule of RFID tags and, more particularly, not by the timing change portion setting "a frequency of the timing higher when input electromagnetic waves are detected a plurality of times for a predetermined period of time," as required by claim 1. That is, according to Erickson, a polling schedule which is changed is different from what is detected (i.e. the incoming RFID signal from an RFID tag).

Accordingly, it is submitted that claim 1 patentably distinguishes over Hattori in view of Erickson for at least the above-mentioned reasons.

Claim 11

Claim 11, which include similar but not identical features to those of claim 1, is submitted to patentably distinguish over Hattori in view of Erickson for at least similar reasons to those of claim 1.

Claims 2-3, 7-9, 13-14 and 18-19

Claims 2-3, 7-9, 13-14 and 18-19, which include all of the limitations of claim 1, are submitted to patentably distinguish over Hattori in view of Erickson for at least the same reasons as claim 1.

Rejection of Claims 4-6, 15-17 and 20-22 under 35 U.S.C. §103(a)

In the Office Action, at item 7, claims 4-6, 15-17 and 20-22 are rejected under 35 U.S.C. §103(a) as being unpatentable over Hattori in view of Erickson in further view of Pombo et al. (US Patent No. 5,799,256, hereafter referred to as Pombo).

This ground of rejection is respectfully traversed.

Claims 4-6, 15-17 and 20-22, which include all of the limitations of claim 1 or claim 11, are submitted to patentably distinguish over Hattori in view of Erickson for at least the same reasons as claim 1 or claim 11.

Pombo Reference

The addition of Pombo does not overcome the deficiencies of Hattori and Erickson. This is because, Pombo does not disclose or suggest that "the timing change portion sets a frequency of the timing higher when electromagnetic waves are detected a plurality of times for a predetermined period of time," as required by claim 1 or claim 11. Instead, Pombo discloses a battery control 122 which operates as a switch for decoupling the battery from transmitter 110 and receiver 108 to selectively remove battery power from the transmitter 110 and the receiver 108. Pombo further discloses that predicting the user location allows the mobile station 104 to only search for controls channels broadcast by base stations in the location where the user and the

mobile station 104 will be present. Since not all control channels are broadcast by all base stations, if the mobile station 104 can determine which control channels are in use, the mobile station can reduce the time during which the receiver must be powered up, drawing power from the battery 120. The mobile station 104 maintains a historical record of past base station communications and associated times when a control channel from a particular base station was detected. The base station will search for a base station more frequently around the time and on a channel where the base station was previously found and less frequently otherwise. (See Pombo at Col. 5, lines 24-42.) Thus, Pombo discloses a use of historical data to search more or less frequently for a particular base station. Pombo, however, is silent regarding the use of detection of an input electromagnetic wave a plurality of times as a condition for a higher timing frequency.

Accordingly, it is submitted that claims 4-6, 15-17 and 20-22, which include all of the limitations of claim 1 or claim 11, patentably distinguish over Hattori in view of Erickson in further view of Pombo for at least the same reasons as claim 1 or claim 11.

Rejection of Claim 10 under 35 U.S.C. §103(a)

In the Office Action, at item 8, claim 10 is rejected under 35 U.S.C. §103(a) as being unpatentable over Hattori in view of Flick (US Patent No. 7,005,960).

This ground of rejection is respectfully traversed.

In the Office Action, at page 10, the Examiner acknowledges that "Hattori fails to disclose a transmission control portion for controlling so as to transmit a second electromagnetic wave for a longer period of time than a first electromagnetic wave when the switch is turned on at least twice within a predetermined period of time."

Flick Reference

In the Office Action, the Examiner contends that Flick teaches "a handheld transmitter in a remote keyless entry system that transmits signals to unlock a door on a vehicle when a door unlock button is actuated by a user. If the user desires to unlock all the doors on the vehicle, the user just needs to actuate the door unlock

button a second time within in predetermined period of time of the first door unlock button actuation. (See Col. 1, lines 26-42)."

Although the Examiner's contentions may be correct, with regard to how the locking and unlocking action occurs based on the user pressing an unlock button, Flick is silent regarding anything related to transmission of "a second electromagnetic wave for a longer period of time than a first electromagnetic wave when the switch is turned on at least twice within a predetermined period of time," as required by claim 10. More particularly, in Flick a wireless transmitter 46 transmits respective signals based upon operation of the user operable switches 42A-42D. (See Flick at Col. 3, lines 51-59.) Flick, however, is silent regarding details related to the respective signals sent by wireless transmitter 46. Furthermore, controller 20 includes first and second outputs 22 and 24 that output signals corresponding to pulse P11 P12, P11', P12', P2 and P2' as shown in Figs. 3 and 4 of Flick. As clearly shown in Figs. 3 and 4 Flick, however, such pulses appear to have consistent duration. Moreover, Flick is silent regarding any details related to the duration of such pulses.

Accordingly, it is submitted that claim 10 patentably distinguishes over Hattori in view of Flick for at least the above-mentioned reasons.

Rejection of Claim 12 under 35 U.S.C. §103(a)

In the Office Action, at item 9, claim 12 is rejected under 35 U.S.C. §103(a) as being unpatentable over Hattori in view of Erickson in further view of Flick. This ground of rejection is respectfully traversed.

Claim 12, which includes all of the limitations of claim 11, is submitted to patentably distinguish over Hattori in view of Erickson for at least the same reasons as claim 11.

Flick Reference

The addition of Flick does not overcome the deficiencies of Hattori in view of Erickson. This is because, Flick does not disclose or suggest "the timing change portions sets a frequency of the timing higher when input electromagnetic waves are detected a plurality of times for a predetermined period of time," as required by claim

11. That is, Flick is silent regarding a timing change portion which sets a frequency of the timing higher based on a condition (i.e., when input electromagnetic waves are detected a plurality of times before a predetermined period of time). This is because, Flick does not contemplate changes to the frequency of the timing at which input reception portion detects input electromagnetic waves.

Accordingly, it is submitted that claim 12 patentably distinguishes over Hattori in view of Erickson in further view of Flick for at least the above-mentioned reasons.

Rejection of Claims 24 and 26 under 35 U.S.C. §103(a)

In the Office Action, at item 10, claims 24 and 26 are rejected under 35 U.S.C. §103(a) as being unpatentable over Hattori and Erickson in further view of Kehlstadt (US Patent Publication No. 2002/0093481).

This ground of rejection is respectfully traversed.

Claims 24 and 26, which include all of the limitations of claim 1 or claim 11, are submitted to patentably distinguish over Hattori in view of Erickson for at least the same reasons as claim 1 or claim 11.

Kehlstadt Reference

The addition of Kehlstadt does not overcome the deficiencies of Hattori and Erickson. This is because, Kehlstadt does not disclose or suggest "the timing change portion sets a frequency of the timing higher when electromagnetic waves are detected a plurality of times for a predetermined period of time," as required by claim 1 or 11. Instead, Kehlstadt discloses capacitive detection circuits for detecting when a hand is touching or in close proximity to electrodes 14, 18 and/or 20. In Kehlstadt, the pointing device requests periodically capacitance measurements. If the output hand detector is asserted, the system resumes full power operation. If not, the system goes idle for a known duration after which a new capacitance measurement phase is requested. (See Kehlstadt at paragraphs [0022] and [0031].) That is, the detected electromagnetic waves correspond to the capacitance signal from the capacitance detection circuit. Kehlstadt, however, discloses the use of a periodic time basis for example every 500ms to detect such a capacitance signal and more

Application No.: 10/528,726
Amendment Dated: April 1, 2008
Reply to Office Action of: January 31, 2008

MAT-8674US

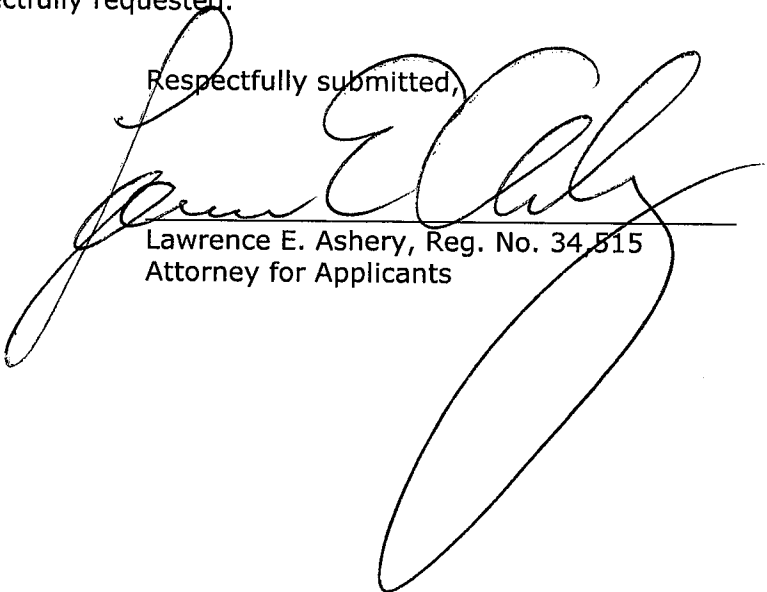
particularly, does not disclose the setting of such a detection frequency higher when the input electromagnetic waves are detected a plurality of times for a predetermined period of time. (See Kehlstadt at paragraph [0030].)

Accordingly, it is submitted that claims 24 and 26 patentably distinguish over Hattori and Erickson in view of Kehlstadt for at least the above-mentioned reasons.

Conclusion

In view of the remarks, Applicants submit the application is in condition for allowance, which action is respectfully requested.

Respectfully submitted,



Lawrence E. Ashery, Reg. No. 34,515
Attorney for Applicants

EB/nm

Dated: April 1, 2008

P.O. Box 980
Valley Forge, PA 19482
(610) 407-0700

EB258388